



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/550,408

09/23/2005

Miguel Albert Capote

90078U

2279

20529

7590

02/02/2009

THE NATH LAW GROUP

112 South West Street

Alexandria, VA 22314

EXAMINER

SELLERS, ROBERT E

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

02/02/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/550,408	Applicant(s) CAPOTE ET AL.	
	Examiner ROBERT SELLERS	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 6-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1796

Claims 6-23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to non-elected inventions, there being no allowable generic or linking claim. The election was made **without** traverse in the non-Final rejection mailed May 23, 2008.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention at the time the application was filed.

1. There is no support on pages 15-16 describing the attachment of the semiconductor die to a substrate such that the fluxing agent is immobilized upon curing.

Art Unit: 1796

2. Claims 1-5 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the inerting agent c)(ii) eliminating the need for cleaning to remove **corrosive** residues (page 9, second paragraph, lines 2-3), does not reasonably provide enablement for the removal of flux residues [emphasis added]. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. (Withdrawn claims 12 and 18 have also been modified to include the non-enabled term in the amendment filed October 23, 2008.)

The text of section 103(a) of Title 35, U.S. Code not included in this action can be found in the non-Final rejection.

Claims 1-3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhou et al. Patent No. 5,985,456.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chappelow et al. Patent No. 6,610,759 in view of Zhou et al.

The rejections are maintained for the reasons of record set forth in the non-Final rejection. The arguments filed October 23, 2008 have been addressed in the notice of non-compliant amendment mailed October 5, 2008. The arguments filed December 10, 2008 have been considered but are unpersuasive.

Art Unit: 1796

3. The claimed adhesive suitable for attaching a semiconductor die to a substrate merely indicates the ultimate intended utility of the composition and is not a critical limitation. Even if considered, Zhou et al. in column 10, lines 17-18 discloses the use of the adhesive "for attaching flip chips to a substrate."

4. The claimed adhesive immobilizing the fluxing agent upon curing is a condition limitation only relevant upon the attachment of the semiconductor die to a substrate and curing the adhesive, neither of which are required in the claimed composition.

Even if considered, the adhesive of Zhou et al. inherently exhibits such a feature based on the equivalent adhesive containing high melting point and low melting point powders, an unsaturated fluxing agent of the formula RCOOH and a bisphenol A epoxy resin within the claimed inerting agent.

Art Unit: 1796

The amendments necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL** (MPEP § 706.07(a)).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

(571) 272-1093 (Fax No. (571)-273-8300)
Monday to Friday, 9:30 to 6:00

/Robert Sellers/
Primary Examiner
Division 1796

rs
1/29/2009